

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently amended): A method to operate a hearing device comprising an input transducer, a signal processing unit and an output transducer, the method comprising the steps of converting an acoustic input signal into a converted input signal,
processing the converted input signal in a main signal path in order to obtain a main output signal,
supplying the main output signal to an output transducer,
processing the converted input signal in a side signal path to obtain a side path output signal,
filtering the signal in the side signal path by a high-pass filter or a time-domain filter bank, and
superimposing the side path output signal on the main output signal,
wherein a group delay of a signal traveling through the side signal path is smaller than a group delay of a signal traveling through the main signal path.

Claim 2 (Original): The method of claim 1, further comprising the step of adjusting a gain in the side signal path such that an overall gain from the input transducer through the side signal path to the output transducer is approximately equal to one.

Claim 3 (Currently amended): A method to operate a hearing device comprising an input transducer, a signal processing unit and an output transducer, the method comprising the steps of
converting an acoustic input signal into a converted input signal,
processing the converted input signal in a main signal path in order to obtain a main output signal,
supplying the main output signal to an output transducer,
processing the converted input signal in a side signal path to obtain a side path output signal,
~~The method of claim 1, further comprising the step of~~
adjusting a gain, applied to the converted input signal in the side signal path, as a function of a gain applied to the converted input signal in the main signal path[.], wherein the gain applied to the converted input signal in the side signal path is computed from an existing gain model in the main signal path, and

superimposing the side path output signal on the main output signal,

wherein a group delay of a signal traveling through the side signal path is smaller than a group delay of a signal traveling through the main signal path.

Claim 4 (Original): The method of claim 3, wherein the gain applied to the converted input signal in the side signal path is calculated from several or all existing band gains applied in different frequency bands in the main signal path.

Claim 5 Canceled

Claim 6 (Original): The method of claim 1, further comprising the step of limiting the main output signal before the output transducer.

Claim 7 (Currently amended): A method to operate a hearing device comprising an input transducer, a signal processing unit and an output transducer, the method comprising the steps of converting an acoustic input signal into a converted input signal,

processing the converted input signal in a main signal path
in order to obtain a main output signal,

supplying the main output signal to an output transducer,
processing the converted input signal in a side signal path
to obtain a side path output signal, The method of claim 1,
further comprising the steps of

processing the converted input signal in at least one further side signal path to generate at least one further side path output signal,

superimposing the side path output signal on the main
output signal, and

superimposing the at least one further side path output
signal on the main output signal, wherein a group delay of a
signal traveling through the side signal path is smaller than a
group delay of a signal traveling through the main signal path.

Claim 8 (Original): The method of claim 7, further comprising the step of filtering an input signal in at least one of the further side signal paths.

Claim 9 (Original): The method of claim 1 or 7, further comprising the steps of

monitoring a level of the converted input signal,

switching off the processing of the converted input signal in the main signal path in case the level of the converted input signal is below a preset value.

Claim 10 Canceled

Claim 11 (Currently amended): A hearing device comprising a main signal path comprising

at least one input transducer to convert an acoustic input signal into a converted input signal,

a signal processing unit and

an output transducer,

wherein the at least one input transducer is operatively connected to the output transducer via the signal processing unit,

wherein a side signal path is provided that is, on its input side, fed by the converted input signal and that is, on its output side, operatively connected to an adder unit which is further comprised in the main signal path in between the signal processing unit and the output transducer, said side signal path comprising a gain unit,

wherein the side signal path further comprises a high-pass filter unit or a time-domain filter bank, and

wherein a group delay of a signal traveling through the side signal path is smaller than a group delay of a signal traveling through the main signal path.

Claim 12 Canceled

Claim 13 (Original): The hearing device of claim 11, wherein the main signal path further comprises a limiting unit that is arranged in between the adder unit and the output transducer.

Claim 14 (Original): The hearing device of claim 11, wherein the gain unit is operatively connected to the signal processing unit.

Claim 15 (Original): The hearing device of claim 14, wherein a value for a gain, set in the gain unit, is adjustable as a function of a gain of the main signal path.

Claim 16 (Currently amended): A hearing device comprising a main signal path comprising
at least one input transducer to convert an acoustic input
signal into a converted input signal,

a signal processing unit and
an output transducer,
wherein the at least one input transducer is operatively
connected to the output transducer via the signal processing
unit,

wherein a side signal path is provided that is, on its
input side, fed by the converted input signal and that is, on
its output side, operatively connected to an adder unit which is
further comprised in the main signal path in between the signal
processing unit and the output transducer, said side signal path
comprising a gain unit~~The hearing device of claim 11,~~ wherein
further side signal paths are provided, each comprising a
further gain unit and a delay unit, whereas the converted input
signal is fed to the delay unit via the further gain unit, the
output of the delay unit being operatively connected to the
adder unit, ~~if need be via or~~ further adder units.

Claim 17 (Original): The hearing device of claim 16,
wherein at least one of the further side signal path comprises a
further filter unit in between the adder unit and the
corresponding further gain unit.

Claim 18 (Original): The hearing device of claim 16, wherein at least one of the further gain units is operatively connected to the signal processing unit.

Claim 19 (Original): The hearing device of claim 11 or 16, wherein a silence detector unit is provided to which the converted input signal is fed and which is, on its output side, operationally connected to the signal processing unit.

Claim 20 Canceled